

CLAIMS

1. Cosmetic lipcare and/or lip makeup composition comprising a dispersion, in a liquid fatty phase, of particles of a grafted ethylenic polymer, the 5 said polymer being such that, when dispersed in sufficient amount in the composition, the latter is able to form a deposit having a transfer of less than or equal to 35%.

2. Composition according to Claim 1, 10 characterized in that it is able to form a deposit having a transfer of less than or equal to 30%, preferably less than or equal to 25%, preferably less than or equal to 20%, preferably less than or equal to 15%, preferably less than or equal to 10%, preferably 15 less than or equal to 5%.

3. Composition according to either of the preceding claims, characterized in that the grafted ethylenic polymer comprises an ethylenic skeleton which is insoluble in the said liquid fatty phase and side 20 chains which are attached covalently to the said skeleton and are soluble in the said liquid fatty phase.

4. Composition according to one of the preceding claims, characterized in that the ethylenic 25 polymer is dispersed in the absence of additional stabilizer at the surface of the particles.

5. Composition according to one of the

preceding claims, characterized in that the ethylenic polymer is a grafted acrylic polymer.

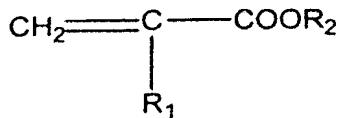
6. Composition according to Claims 3 and 5, characterized in that the grafted ethylenic polymer in dispersion is a grafted acrylic polymer obtainable by free-radical polymerization in an organic polymerization medium:

- of at least one acrylic monomer, and optionally of at least one additional non-acrylic vinyl monomer, to form 10 the said insoluble skeleton; and

- of at least one macromonomer containing a polymerizable end group to form the side chains, the said macromonomer having a weight-average molecular mass of greater than or equal to 200 and the amount of 15 polymerized macromonomer representing from 0.05% to 20% by weight of the polymer.

7. Composition according to Claim 6, characterized in that the acrylic monomer is selected, alone or in a mixture, from the following monomers, and 20 also the salts thereof:

-(i) the (meth)acrylates of formula:



in which:

- R_1 denotes a hydrogen atom or a methyl group;

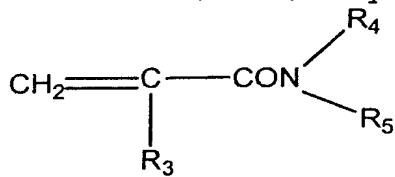
25 - R_2 represents a group chosen from:

- a linear or branched alkyl group containing

from 1 to 6 carbon atoms, the said group possibly comprising in its chain one or more heteroatoms chosen from O, N and S; and/or possibly comprising one or more substituents chosen from -OH, halogen atoms (F, Cl, Br or I) and -NR'R" with R' and R", which may be identical or different, chosen from linear or branched C₁-C₄ alkyls; and/or possibly being substituted with at least one polyoxyalkylene group, especially polyoxyethylene and/or polyoxypropylene, the said polyoxyalkylene group 10. consisting of the repetition of 5 to 30 oxyalkylene units;

- a cyclic alkyl group containing from 3 to 6 carbon atoms, the said group possibly comprising in its chain one or more heteroatoms chosen from O, N and S, and/or possibly comprising one or more substituents chosen from OH and halogen atoms (F, Cl, Br or I);

- (ii) the (meth)acrylamides of formula:



in which:

20 - R₃ denotes a hydrogen atom or a methyl group;

- R₄ and R₅, which may be identical or different, represent a hydrogen atom or a linear or branched alkyl group containing from 1 to 6 carbon atoms, which may comprise one or more substituents chosen from -OH, halogen atoms (F, Cl, Br or I) and -NR'R" with R' and R", which may be identical or different, chosen from

linear or branched C₁-C₄ alkyls; or

- R₄ represents a hydrogen atom and R₅ represents a

1,1-dimethyl-3-oxobutyl group;

- (iii) the (meth)acrylic monomers comprising at least

5 one carboxylic acid, phosphoric acid or sulphonic acid function, such as acrylic acid, methacrylic acid or acrylamidopropanesulphonic acid.

8. Composition according to Claim 7,

characterized in that the acrylic monomer is selected

10 from methyl, ethyl, propyl, butyl and isobutyl

(meth)acrylates; methoxyethyl or ethoxyethyl

(meth)acrylates; trifluoroethyl methacrylate;

dimethylaminoethyl methacrylate, diethylaminoethyl

methacrylate, 2-hydroxypropyl (meth)acrylate, 2-

15 hydroxyethyl (meth)acrylate; dimethylaminopropylmeth-
acrylamide; methacrylic acid; and the salts thereof.

9. Composition according to Claim 7,

characterized in that the acrylic monomer is selected

from methyl acrylate, methoxyethyl acrylate, methyl

20 methacrylate, 2-hydroxyethyl methacrylate, methacrylic
acid and dimethylaminoethyl methacrylate, and mixtures
thereof.

10. Composition according to Claim 7,

characterized in that the acrylic monomer is acrylic

25 acid.

11. Composition according to any one of

Claims 7 to 10, characterized in that the grafted

polymer comprises (meth)acrylic acid.

12. Composition according to any one of Claims 7 to 11, characterized in that the acrylic monomers comprise at least (meth)acrylic acid and at 5 least one monomer selected from the (meth)acrylates and (meth)acrylamides described in sections (i) and (ii) in Claim 8.

13. Composition according to any one of Claims 7 to 12, characterized in that the acrylic 10 monomers comprise at least (meth)acrylic acid and at least one monomer selected from C₁-C₃ alkyl (meth)acrylates.

14. Composition according to any one of the preceding claims, characterized in that the 15 (meth)acrylic acid is present in an amount of at least 5% by weight, relative to the total weight of the polymer, in particular ranging from 5% to 80% by weight, preferably at least 10% by weight, in particular ranging from 10% by weight to 70% by weight, 20 preferentially at least 15% by weight, in particular ranging from 15% to 60% by weight.

15. Composition according to Claim 6 or one of its dependent claims, characterized in that the grafted acrylic polymer does not contain any additional 25 non-acrylic vinyl monomer.

16. Composition according to Claim 6, or one of its dependent claims, characterized in that the

grafted acrylic polymer is obtainable by free-radical polymerization of one or more acrylic monomers and one or more additional non-acrylic vinyl monomers, and of the said macromonomer.

5 17. Composition according to Claim 16, characterized in that the additional non-acrylic vinyl monomers are selected from:

- vinyl esters of formula: $R_6\text{-COO-CH=CH}_2$ in which R_6 represents a linear or branched alkyl group 10 containing from 1 to 6 carbon atoms, or a cyclic alkyl group containing from 3 to 6 carbon atoms and/or an aromatic group, for example of benzene, anthracene or naphthalene type;
- non-acrylic vinyl monomers comprising at least one 15 carboxylic acid, phosphoric acid or sulphonic acid function, such as crotonic acid, maleic anhydride, itaconic acid, fumaric acid, maleic acid, styrenesulphonic acid, vinylbenzoic acid or vinylphosphoric acid, and the salts thereof;
- 20 - non-acrylic vinyl monomers comprising at least one tertiary amine function, such as 2-vinylpyridine or 4-vinylpyridine;
- and mixtures thereof.

18. Composition according to Claim 6 or one 25 of its dependent claims, characterized in that the acrylic monomer represents from 50% to 100% by weight, preferably from 60% to 100% by weight, preferentially

from 70% to 100% by weight of the mixture of acrylic monomer and of optional non-acrylic vinyl monomer.

19. Composition according to Claim 6 or one of its dependent claims, characterized in that the 5 macromonomer comprises at one of the ends of the chain a polymerizable end group selected from a vinyl group or a (meth)acrylate group, and preferably a (meth)acrylate group.

20. Composition according to Claim 6 or one 10 of its dependent claims, characterized in that the weight-average molecular mass of the macromonomer is greater than or equal to 300, preferentially greater than or equal to 500, and more preferentially greater than 600.

15 21. Composition according to the preceding claim, characterized in that the macromonomer has a weight-average molecular mass (Mw) ranging from 300 to 100 000, preferably ranging from 500 to 50 000, preferentially ranging from 800 to 20 000, more 20 preferentially ranging from 800 to 10 000, and more preferentially still ranging from 800 to 6000.

22. Composition according to Claim 6 or one of its dependent claims, characterized in that the polymerized macromonomer represents from 0.1% to 15% by 25 weight of the total weight of the polymer, preferably from 0.2% to 10% by weight, and preferentially from 0.3% to 8% by weight.

23. Composition according to one of the preceding claims, characterized in that the liquid fatty phase comprises a liquid organic compound selected from liquid organic compounds having a total 5 solubility parameter according to the Hansen solubility space of less than or equal to $18 \text{ (MPa)}^{1/2}$, preferably less than or equal to $17 \text{ (MPa)}^{1/2}$.

24. Composition according to one of Claims 1 to 22, characterized in that the liquid fatty phase 10 comprises a liquid organic compound selected from monoalcohols having a total solubility parameter according to the Hansen solubility space of less than or equal to $20 \text{ (MPa)}^{1/2}$.

25. Composition according to any one of the 15 preceding claims, characterized in that it comprises a volatile oil.

26. Composition according to the preceding claim, characterized in that it comprises a volatile oil selected from octamethylcyclotetrasiloxane, 20 decamethylcyclopentasiloxane, dodecamethylcyclohexasiloxane, heptamethylhexyltrisiloxane, heptamethyloctyltrisiloxane, octamethyltrisiloxane, decamethyltetrasiloxane, isododecane, isodecane and isoheptadecane and mixtures thereof.

25 27. Composition according to Claim 25 or 26, characterized in that the volatile oil is present in an amount ranging from 1% to 70% by weight, relative to

the total weight of the composition, preferably ranging from 5% to 50% by weight and preferentially ranging from 10% to 35% by weight.

28. Composition according to one of the 5 preceding claims, characterized in that the liquid fatty phase is a non-silicone-based liquid fatty phase.

29. Composition according to the preceding claim, characterized in that the non-silicone-based liquid fatty phase is composed of at least 50% by 10 weight of at least one non-silicone-based organic liquid compound selected from:

- non-silicone-based organic liquid compounds having a total solubility parameter according to the Hansen solubility space of less than or equal to 18 (MPa)^{1/2};
- 15 - liquid monoalcohols having a total solubility parameter according to the Hansen solubility space of less than or equal to 20 (MPa)^{1/2}; and
- mixtures thereof.

30. Composition according to either of 20 Claims 28 and 29, characterized in that the non-silicone-based liquid fatty phase contains less than 50% by weight of silicone-based liquid organic compounds having a total solubility parameter according to the Hansen solubility space of less than or equal to 25 18 (MPa)^{1/2}.

31. Composition according to one of Claims 28 to 30, characterized in that the non-silicone-based

liquid fatty phase does not contain silicone-based liquid organic compounds.

32. Composition according to one of Claims 6 to 31, characterized in that the macromonomer is a 5 carbon-based macromonomer.

33. Composition according to the preceding claim, characterized in that the carbon-based macromonomer is selected from:

- (i) linear or branched C₈-C₂₂ alkyl acrylate or 10 methacrylate homopolymers and copolymers having a polymerizable end group selected from vinyl or (meth)acrylate groups;
- (ii) polyolefins having a polymerizable ethylenically unsaturated end group.

15 34. Composition according to Claim 33, characterized in that the carbon-based macromonomer is selected from:

- (i) poly(2-ethylhexyl acrylate) macromonomers with a mono(meth)acrylate end group; poly(dodecyl acrylate) 20 macromonomers with a mono(meth)acrylate end group; poly(dodecyl methacrylate) macromonomers; poly(stearyl acrylate) macromonomers with a mono(meth)acrylate end group; poly(stearyl methacrylate) macromonomers with a mono(meth)acrylate end group;
- 25 - (ii) polyethylene macromonomers, polypropylene macromonomers, macromonomers of polyethylene/polypropylene copolymer, macromonomers of

polyethylene/polybutylene copolymer, polyisobutylene macromonomers, polybutadiene macromonomers, polyisoprene macromonomers, polybutadiene macromonomers, poly(ethylene/butylene)-polyisoprene 5 macromonomers, these macromonomers having a (meth)acrylate end group.

35. Composition according to Claim 34, characterized in that the carbon-based macromonomer is selected from:

10 - (i) poly(2-ethylhexyl acrylate) macromonomers with a mono(meth)acrylate end group, poly(dodecyl acrylate) macromonomers with a mono(meth)acrylate end group; - (ii) poly(ethylene/butylene) methacrylate.

36. Composition according to Claim 35, characterized in that the grafted polymer is selected 15 from the polymers obtained by polymerization: - of methyl acrylate and of a polyethylene/polybutylene macromonomer containing a methacrylate end group, in particular in a solvent chosen from isododecane, 20 isononyl isononanoate, octyldodecanol, diisostearyl malate and a C₁₂-C₁₅ alkyl benzoate; - of methoxyethyl acrylate and of a polyethylene/polybutylene macromonomer containing a methacrylate end group, in particular in isododecane; 25 - of methyl acrylate/methyl methacrylate monomers and of a polyethylene/polybutylene macromonomer containing a methacrylate end group, in particular in isododecane;

- of methyl acrylate/acrylic acid monomers and of a polyethylene/polybutylene macromonomer containing a methacrylate end group, in particular in isododecane;
- of methyl acrylate/dimethylaminoethyl methacrylate monomers and of a polyethylene/polybutylene macromonomer containing a methacrylate end group, in particular in isododecane;
- of methyl acrylate/2-hydroxyethyl methacrylate monomers and of a polyethylene/polybutylene macromonomer containing a methacrylate end group, in particular in isododecane.

37. Composition according to any one of Claims 28 to 36, characterized in that the grafted polymer is a non-silicone-based grafted polymer.

15 38. Composition according to the preceding claim, characterized in that the non-silicone-based grafted polymer contains predominantly a carbon-based macromonomer and optionally contains not more than 7% by weight of silicone-based macromonomer.

20 39. Composition according to Claim 37 or 38, characterized in that the non-silicone-based grafted polymer is free of silicone-based macromonomer.

40. Composition according to one of Claims 1 to 27, characterized in that the liquid fatty phase is 25 a silicone-based liquid fatty phase.

41. Composition according to Claim 40, characterized in that the silicone-based liquid fatty

phase is composed of at least 50% by weight of at least one silicone-based organic liquid compound selected from silicone-based organic liquid compounds having a total solubility parameter according to the Hansen 5 solubility space of less than or equal to 18 (MPa)^{1/2}.

42. Composition according to either of Claims 40 and 41, characterized in that the silicone-based organic liquid compound comprises a volatile silicone oil.

10 43. Composition according to Claim 42, characterized in that the volatile silicone oil is selected from octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, dodecamethylcyclohexa-siloxane, heptamethylhexyltrisiloxane, 15 heptamethyloctyltrisiloxane, octamethyltrisiloxane, decamethyltetrasiloxane and mixtures thereof.

44. Composition according to one of Claims 30 and 41 to 43, characterized in that the silicone-based organic liquid compound comprises a non-volatile 20 silicone oil.

45. Composition according to the preceding claim, characterized in that the non-volatile silicone oil is selected from non-volatile polydialkylsiloxanes; polydimethylsiloxanes comprising alkyl, alkoxy or 25 phenyl groups, which are pendent or at the end of a silicone chain, these groups containing from 2 to 24 carbon atoms; phenyl silicones; polysiloxanes modified

with fatty acids (especially of C₈-C₂₀), fatty alcohols (especially of C₈-C₂₀) or polyoxyalkylenes (especially polyoxyethylene and/or polyoxypropylene); amino polysiloxanes; polysiloxanes containing hydroxyl groups; fluoro polysiloxanes comprising a fluorinated group that is pendent or at the end of a silicone chain, containing from 1 to 12 carbon atoms, all or some of the hydrogen atoms of which are replaced with fluorine atoms; and mixtures thereof.

10 46. Composition according to one of the preceding claims, characterized in that the liquid fatty phase contains less than 50% by weight of non-silicone-based liquid organic compounds.

15 47. Composition according to Claim 29 or 46, characterized in that the non-silicone-based organic liquid compound having a total solubility parameter according to the Hansen solubility space of less than or equal to 18 (MPa)^{1/2} is selected from carbon-based oils, hydrocarbon-based oils and fluoro oils, alone or 20 in a mixture; linear, branched and/or cyclic alkanes, optionally volatile; esters, and especially linear, branched or cyclic esters having at least 6 carbon atoms; ketones, and especially ketones having at least 6 carbon atoms; ethers, and especially ethers having at 25 least 6 carbon atoms.

48. Composition according to Claim 29, characterized in that the monoalcohols having a total

solubility parameter according to the Hansen solubility space of less than or equal to 20 (MPa)^{1/2} are selected from aliphatic fatty monoalcohols having 6 to 30 carbon atoms, the hydrocarbon chain containing no

5 substitution group, and especially oleyl alcohol, octyldodecanol, decanol and linoleyl alcohol.

49. Composition according to Claims 40 to 45, characterized in that the liquid fatty phase contains no non-silicone-based liquid organic

10 compounds.

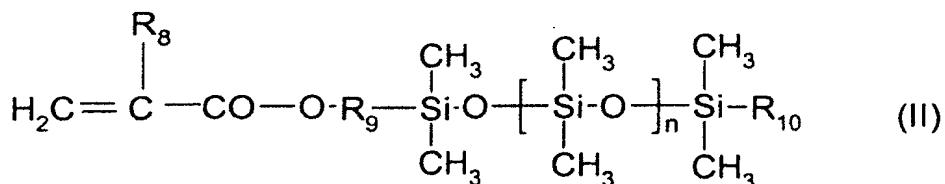
50. Composition according to one of Claims 6 and 40 to 48, characterized in that the macromonomer is a silicone-based macromonomer.

51. Composition according to Claim 50,

15 characterized in that the silicone-based macromonomer is an organopolysiloxane macromonomer, preferably a polydimethylsiloxane macromonomer.

52. Composition according to Claim 50 or 51, characterized in that the silicone-based macromonomer

20 is selected from the macromonomers of formula (II) below:

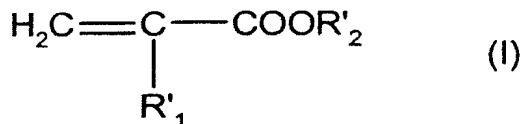


in which R₈ denotes a hydrogen atom or a methyl group; R₉ denotes a divalent hydrocarbon group having from 1 to

10 carbon atoms and optionally contains one or two ether bonds -O-; R₁₀ denotes an alkyl group having from 1 to 10 carbon atoms, in particular from 2 to 8 carbon atoms; n denotes an integer ranging from 1 to 300, 5 preferably ranging from 3 to 200 and preferentially ranging from 5 to 100.

53. Composition according to Claim 5 and either of Claims 50 to 51, characterized in that the grafted acrylic polymer is obtainable by free-radical 10 polymerization in the polymerization medium:

- of a main acrylic monomer selected from C₁-C₃ alkyl (meth)acrylates, alone or in a mixture, and optionally one or more additional acrylic monomers selected from acrylic acid, methacrylic acid and alkyl 15 (meth)acrylates of formula (I):



in which:

- R'₁ denotes a hydrogen atom or a methyl group;
- R'₂ represents

20 - a linear or branched alkyl group containing from 1 to 6 carbon atoms, the said group containing in its chain one or more oxygen atoms and/or containing one or more substituents selected from -OH, halogen atoms (F, Cl, Br, I) and -NR'R'', where R' 25 and R'', which are identical or different, are selected

from C₁-C₃ linear or branched alkyls;

- a cyclic alkyl group containing from 3 to 6 carbon atoms, it being possible for the said group to contain in its chain one or more oxygen atoms and/or to 5 contain one or more substituents selected from OH and halogen atoms (F, Cl, Br, I);
- and salts thereof, to form the said insoluble skeleton;
- and of a silicone-based macromonomer.

10 54. Composition according to the preceding claim, characterized in that R'₂ denotes a group selected from methoxyethyl, ethoxyethyl, trifluoroethyl, 2-hydroxyethyl, 2-hydroxypropyl, dimethylaminoethyl, diethylaminoethyl and 15 dimethylaminopropyl groups.

55. Composition according to Claim 50 or 51, characterized in that the main acrylic monomer is selected from methyl (meth)acrylate, ethyl (meth)acrylate, n-propyl (meth)acrylate, isopropyl 20 (meth)acrylate and mixtures thereof.

56. Composition according to Claim 50, characterized in that the main acrylic monomer is selected from methyl acrylate, methyl methacrylate, ethyl acrylate and mixtures thereof.

25 57. Composition according to one of Claims 50 to 53, characterized in that the additional acrylic monomer is selected from (meth)acrylic acid,

methoxyethyl (meth)acrylate, ethoxyethyl (meth)acrylate, trifluoroethyl methacrylate, dimethylaminoethyl methacrylate, diethylaminoethyl methacrylate, 2-hydroxypropyl (meth)acrylate, 2-hydroxyethyl (meth)acrylate and salts thereof.

5 58. Composition according to the preceding claim, characterized in that the additional acrylic monomer is selected from acrylic acid and methacrylic acid.

10 59. Composition according to Claim 49, characterized in that the macromonomer is selected from polydimethylsiloxanes containing a mono(meth)acrylate end group, and especially monomethacryloyloxypropyl polydimethylsiloxanes.

15 60. Composition according to one of Claims 5 and 37 to 56, characterized in that the grafted acrylic polymer is selected from the polymers obtained by polymerization:

- of methyl acrylate and a monomethacryloyloxypropyl 20 polydimethylsiloxane macromonomer having a weight-average molecular weight ranging from 800 to 6000, in particular in decamethylcyclopentasiloxane or phenyl trimethicone;

- of methyl acrylate, acrylic acid and a 25 monomethacryloyloxypropyl polydimethylsiloxane macromonomer having a weight-average molecular weight ranging from 800 to 6000, in particular in

decamethylcyclopentasiloxane or phenyl trimethicone.

61. Composition according to any one of Claims 40 to 60, characterized in that the grafted polymer is a silicone-based grafted polymer.

5 62. Composition according to the preceding claim, characterized in that the silicone-based grafted polymer contains predominantly a silicone-based macromonomer and optionally contains not more than 7% by weight of carbon-based macromonomer.

10 63. Composition according to Claim 61 or 62, characterized in that the silicone-based grafted polymer is free of carbon-based macromonomer.

64. Composition according to one of the preceding claims, characterized in that the grafted ethylenic polymer has a weight-average molecular mass (Mw) of between 10 000 and 300 000, especially between 15 000 and 200 000, more preferably between 25 000 and 150 000.

65. Composition according to one of the preceding claims, characterized in that the particles of grafted ethylenic polymer have an average size ranging from 10 to 400 nm, preferably ranging from 20 to 200 nm.

66. Composition according to one of the preceding claims, characterized in that the grafted ethylenic polymer is a film-forming polymer.

67. Lipcare and/or lip makeup composition

comprising a dispersion of particles of a grafted ethylenic polymer in a liquid fatty phase and at least one pulverulent colorant selected in particular from pigments, nacres or other fillers having an optical 5 effect and mixtures thereof.

68. Composition according to the preceding claim, characterized in that it comprises a dispersion of particles of a grafted ethylenic polymer in a liquid fatty phase as defined according to one of Claims 3 to 10 60.

69. Composition according to any one of the preceding claims, characterized in that the grafted ethylenic polymer is present in the composition in an amount, in terms of solids content, ranging from 1% to 15 66.5% by weight relative to the total weight of the composition, preferably ranging from 6% to 45% and better still ranging from 8% to 40% by weight.

70. Composition according to any one of the preceding claims, characterized in that it contains 20 from 0.1% to 50% by weight of waxes, relative to the total weight of the composition, and preferably from 1% to 30% by weight.

71. Composition according to any one of the preceding claims, characterized in that it comprises a 25 cosmetic ingredient selected from vitamins, trace elements, softeners, sequestrants, perfumes, alkalifying or acidifying agents, preservatives,

surfactants, sunscreens, antioxidants and mixtures thereof.

72. Cosmetic composition according to any one of the preceding claims, characterized in that it 5 is in the form of a paste or stick.

73. Cosmetic composition according to any one of the preceding claims, characterized in that it is in anhydrous form.

74. Cosmetic assembly comprising:
10 a) a container delimiting at least one compartment, the said container being closed by a closing member; and
b) a composition disposed within the said compartment, the composition being in accordance with any one of the preceding claims.

15 75. Cosmetic assembly according to Claim 74, characterized in that the container is formed, at least in part, of at least one thermoplastic material.

76. Cosmetic assembly according to Claim 74, characterized in that the container is formed, at least 20 in part, of at least one non-thermoplastic material, in particular of glass or of metal.

77. Assembly according to any one of Claims 74 to 76, characterized in that, with the container in its closed position, the closing member is screwed onto 25 the container.

78. Assembly according to any one of Claims 74 to 77, characterized in that, with the container in

its closed position, the closing member is coupled to the container other than by screwing, in particular by snap fastening, adhesive bonding or welding.

79. Cosmetic method of making up or non-
5 therapeutically caring for the lips, comprising the application to the lips of a composition according to any one of Claims 1 to 73.

80. Use of a composition according to any one of Claims 1 to 73 to give a non-transfer deposit,
10 in particular a non-transfer makeup deposit on the lips.

81. Use of a sufficient amount of a dispersion, in a liquid fatty phase, of a grafted ethylenic polymer in a cosmetic composition to give a
15 deposit on the lips that has a transfer of less than or equal to 35%.